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Lenny Lee Albin

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EXAMINER

LEUNG, JENNIFER A

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/806,563	Applicant(s) ALBIN, LENNY LEE	
	Examiner JENNIFER A. LEUNG	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-21, 23-33, 35-40, 42-45, 47-56 and 58 is/are pending in the application.
- 4a) Of the above claim(s) 47-56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-21, 23-33, 35-40, 42-45 and 58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9-21-09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed on May 29, 2009 has been carefully considered. Claims 6, 22, 34, 41, 46, 57 and 59 are cancelled. Claims 47-56 are withdrawn. Claims 1-5, 7-21, 23-33, 35-40, 42-45 and 58 are under consideration.
2. The previously indicated allowability of claims 6, 7, 12, 13, 22, 23, 58 and 59 is withdrawn in view of the newly discovered reference(s) and a reinterpretation of the claimed subject matter. Rejections based on the newly cited reference(s) follow.

Terminal Disclaimer

3. The terminal disclaimer filed on April 16, 2009 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of copending Application No. 10/593,499 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-5, 7-21, 23-33, 35-40, 42-45 and 58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, it is unclear as to whether the "fluidized catalytic cracking unit" should be considered as part of the claimed system. The preamble of the claim suggests that the fluidized catalytic cracking unit is not part of the claimed system (i.e., it is recited as intended

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use, as set forth by the term “for”), whereas the body of the claim suggests that the fluidized catalytic cracking unit is part of the claimed system (i.e., in view of the limitation, “the transfer port being *in fluid communication with* the fluidized catalytic cracking unit” in lines 9-10).

Regarding claim 18, it is unclear as to whether the “fluidized catalytic cracking unit” should be considered as part of the claimed system. The preamble of the claim suggests that the fluidized catalytic cracking unit is not part of the claimed system (i.e., it is recited as intended use, as set forth by the term “for”), whereas the body of the claim suggests that the fluidized catalytic cracking unit is part of the claimed system (i.e., in view of the limitation, “the loading unit being *in fluid communication with...* the fluidized catalytic cracking unit” in lines 4-5).

Regarding claim 32, it is unclear as to whether the “fluidized catalytic cracking unit” should be considered as part of the claimed system. The preamble of the claims suggests that the fluidized catalytic cracking unit is not part of the claimed system (i.e., it is recited as intended use, as set forth by the term “for”), whereas the body of the claim suggests that the fluidized catalytic cracking unit is part of the claimed system (i.e., in view of the limitation, “a loading unit *in fluid communication with...* the fluidized catalytic cracking unit” in lines 5-6).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 4, 8, 9, 11, 15-21, 24, 26, 27 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Freeman (US 4,005,908).

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Regarding claim 1, Freeman (see FIG. 1) discloses an apparatus comprising:

a dust collector (i.e., filter assembly 64) in fluid communication with a storage bin (10);

a vacuum producer (i.e., pump 120) in fluid communication with the dust collector, the vacuum producer being capable of generating a vacuum within the dust collector to draw material into the dust collector (see column 3, lines 55-59; column 4, lines 28-45);

a transfer pot (i.e., defined by cylindrical wall 48 and bottom section 46) in fluid communication with the dust collector for receiving material from the dust collector, the transfer pot being in fluid communication with a point of use for the material (i.e., via conduit 116) and a source of pressurized air (i.e., supplied by lines 130, 112, via pump 120), so that the transfer pot is capable of being pressurized; and

a plurality of load cells (i.e., labeled “scales”) that are capable of measuring the weight of the dust collector, the transfer pot and the material drawn into the dust collector.

Although Freeman does not disclose that the point of use comprises, specifically, a fluidized catalytic cracking unit, the unit is not considered an element of the claimed apparatus. Note the recitation of an intended use of the system “*for* storing and loading catalyst and/or additives into a fluidized catalytic cracking unit” in the preamble of the claim. MPEP 2111.02. The apparatus of Freeman would be capable of performing the intended use as recited in the preamble, and therefore the apparatus meets the claim. In addition, the recitations with respect to the manner of operating the apparatus or the materials worked upon by the apparatus do not impart patentable weight to the claim. MPEP 2114, 2115.

Regarding claim 4, the dust collector comprises a filter (see FIG. 3; column 2, line 45 to column 3, line 12) in fluid communication with the vacuum producer (i.e., via line 124), so that

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the filter collects dust from within the dust collector.

Regarding claim 8, the dust collector comprises a substantially cylindrical upper portion (i.e., including annular base section 66) and an adjoining, substantially conical lower portion (i.e., tapered section 50); and the transfer pot comprises a substantially cylindrical upper portion (i.e., cylindrical section 48) and a substantially conical lower portion (i.e., bottom section 46) adjoining the upper portion of the transfer pot.

Regarding claim 9, the lower portion (50) of the dust collector has an opening formed therein for permitting material to flow from the dust collector to the transfer pot.

Regarding claim 11, the lower portion (46) of the transfer pot (44) has an opening formed therein (i.e., in communication with conduit 116) for permitting material to be transferred from the transfer pot to a point of use (see FIG. 1).

Regarding claims 15-17, the dust collector and the transfer pot each comprise a respective sidewall; the storage bin and the dust collector are non-adjoining; and the dust collector adjoins the transfer pot. (see FIG. 1).

Regarding claim 18, Freeman (see FIG. 1) discloses an apparatus comprising:

a storage bin (10) at a first location;

a loading unit (i.e., comprising batching vessel 44 and filter assembly 64) positioned in a second location remote from the first location; and

a plurality of load cells (i.e., labeled “scales”; see column 5, lines 43-55), capable of measuring a weight of the loading unit and material within the loading unit;

wherein the loading unit is in fluid communication with the storage bin (i.e., via conduit 53) and a point of use (i.e., via conduit 116) on a selective basis (i.e., by manipulation of, e.g.,

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valves 55, 118); and wherein the loading unit is capable of being evacuated (i.e., via conduit 124 and pump 120) so that a resulting vacuum within the loading unit draws material from the storage bin, and the loading unit is capable of being pressurized (i.e., by supplying air via pump 120 and conduits 130, 112, and manipulation of valves), so that material may be transferred to its point of use; (see column 3, lines 55-59; column 4, lines 28-45).

Although Freeman does not disclose that the point of use comprises, specifically, a fluidized catalytic cracking unit, the unit is not considered an element of the claimed apparatus. Note the recitation of an intended use of the system “*for* storing and loading catalyst and/or additives into a fluidized catalytic cracking unit” in the preamble of the claim. MPEP 2111.02. The apparatus of Freeman would be capable of performing the intended use as recited in the preamble, and therefore the apparatus meets the claim. In addition, the recitations with respect to the manner of operating the apparatus or the materials worked upon by the apparatus do not impart patentable weight to the claim. MPEP 2114, 2115.

Regarding claims 19, 27 and 31, the loading unit comprises a dust collector (i.e., filter assembly 64) and a transfer pot (i.e., defined by cylindrical wall 48 and bottom section 46), wherein the dust collector and the transfer pot each comprise a respective sidewall (see FIG. 1); and wherein the dust collector adjoins the transfer pot. (see FIG. 1).

Regarding claim 20, the apparatus comprises a vacuum producer (i.e., pump 120; FIG. 1), capable of evacuating the loading unit.

Regarding claim 21, the dust collector comprises a filter (see FIG. 3; column 2, line 45 to column 3, line 12) in fluid communication with the vacuum producer (i.e., via line 124), capable of collecting dust generated by the transfer of material from the storage bin (10).

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Regarding claim 24, the dust collector comprises a substantially cylindrical upper portion (i.e., including annular base section 66) and an adjoining, substantially conical lower portion (i.e., tapered section 50); and the transfer pot comprises a substantially cylindrical upper portion (i.e., cylindrical section 48) and a substantially conical lower portion (i.e., bottom section 46) adjoining the upper portion of the transfer pot.

Regarding claim 26, the lower portion (46) of the transfer pot has an opening formed therein (i.e., in communication with conduit 116) for permitting material to be transferred from the transfer pot to a point of use (see FIG. 1).

Instant claims 1, 4, 8, 9, 11, 15-21, 24, 26, 27 and 31 structurally read on the apparatus of Freeman.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2, 3, 7 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman (US 4,005,908).

Regarding claim 2, Freeman discloses a conduit (54), equipped with a flexible coupling (157), and coupling the dust collector and the storage bin, so that the dust collector and storage bin are in fluid communication via said conduit (see column 2, lines 39-44; column 5, lines 50-55). Freeman, however, does not specifically disclose the use of a “hose” for providing the fluid communication. In any event, the examiner takes Official Notice that the selection of a hose, as

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an alternative to the conduit with the flexible coupling, for providing fluid communication between the vessels while enabling vertical movement of the loading unit, would have been considered conventional to those having ordinary skill in the art.

Regarding claim 3, the apparatus further comprises a first valve (55) for isolating the dust collector (64) from the storage bin (10) on a selective basis.

Regarding claims 7 and 23, Freeman discloses that the loading unit is mounted on a plurality of legs (56, 58, 60, 62; see column 2, lines 36-39), wherein the legs are mounted on the load cells (i.e., "scales"). Freeman, however, fails to disclose a cabinet for housing the dust collector and transfer pot, and the claimed mounting configuration to the cabinet to the load cells. In any event, it would have been obvious for one of ordinary skill in the art at the time the invention was made to provide a cabinet, and a corresponding mounting of the cabinet to the load cells, in the apparatus of Freeman, because the examiner takes Official Notice that the provision of a cabinet for housing solids handling equipment, for preventing contamination of the solids being handled, as well as the surrounding environment, would have been considered conventional to one having ordinary skill in the art.

7. Claims 5 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman (US 4,005,908) in view of Harpham (WO 00/48723).

Regarding claim 5, Freeman fails to disclose a volume chamber and a moisture trap for drying the air. Harpham, however, teaches that when compressed air is used as the conveying medium, a dehumidifying apparatus may be connected before or after the compressor, if the material being conveyed is sensitive to moisture (see page 4, lines 12-13). It would have been obvious for one of ordinary skill in the art at the time the invention was made to provide a

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volume chamber/moisture trap for drying the air used to pressurize the loading unit in the apparatus of Freeman, because such means would have prevented the moisture in the air from affecting a moisture sensitive material being conveyed by the apparatus, as taught by Harpham. The Examiner further takes Official Notice that a volume chamber/moisture trap would have been considered a conventional dehumidifying apparatus in the art.

Regarding claim 28, Freeman is silent as to the second location being no more than approximately twenty feet from the first location. In any event, it would have been an obvious design choice for one of ordinary skill in the art at the time the invention was made to configure the second location to be no more than approximately twenty feet away from the first location in the apparatus of Freeman, on the basis of suitability for the intended use and absent a showing of unexpected results thereof, e.g., in order to minimize the amount of space occupied by the system. Furthermore, the claimed distance would have been considered conventional in the art (see Harpham, page 4, line 19 to page 5, line 3).

8. Claims 14, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman (US 4,005,908) in view of Brandauer et al. (EP 476 249).

Freeman fails to disclose at least two storage bins, wherein another of the hoses is coupled to the dust collector and a second storage bin, and a manifold places the loading unit in fluid communication with the at least two storage bins on a selective basis. Brandauer et al., however, teaches a conventionally known apparatus (see FIG. 2; Abstract; Machine Translation) for pneumatically conveying bulk material from a plurality of sources to a single destination, wherein the apparatus comprises a first bin (not shown) and a second bin (not shown), wherein the bins are coupled to the loading unit via piping (19 and 20, respectively), and the bins are

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isolated from the loading unit via a first valve (21) and a second valve (22), respectively; the valves and piping forming a manifold. It would have been obvious for one of ordinary skill in the art at the time the invention was made to provide the claimed configuration of another storage bin, hose and a manifold, etc. in the apparatus of Freeman, on the basis of suitability for the intended use thereof, because the configuration would have allowed for the conveyance of a bulk material from a plurality of sources to a single destination, as taught by Brandauer et al. Also, the duplication of parts for multiplied effect was held to be obvious. See MPEP 2144.04.

Allowable Subject Matter

9. Claims 10, 12, 13, 25 and 58 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The prior art does not disclose or adequately suggest the claimed apparatus for injecting or loading catalyst and/or additives into a fluidized catalytic cracking unit, wherein a valve covers the opening of the substantially conical lower portion of the dust collector on a selective basis, said valve having a plug movable between an upper and a lower position in response to impingement of pressurized air thereon (see claims 10, 25). In addition, the prior art does not disclose or adequately suggest the claimed apparatus for injecting or loading catalyst and/or additives into a fluidized catalytic cracking unit, wherein the vacuum producer is in fluid communication with the source of pressurized air, and the apparatus comprises the recited configuration of a first valve, second valve, third valve, fourth valve, and controller (see claim 12).

10. Claims 32, 33, 35-40 and 42-45 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action. As noted in

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the previous office action, the prior art does not disclose or adequately suggest the claimed apparatus for loading catalyst and/or additives into a fluidized catalytic cracking unit, wherein the controller is specifically programmed to open the third valve (which isolates the transfer pot from the fluidized catalytic cracking unit) only after it fully closes the fourth valve (which isolates the transfer pot from the source of pressurized air).

Response to Arguments

11. Applicant's comments with respect to claims 1-5, 7-21, 23-33, 35-40, 42-45 and 58 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JENNIFER A. LEUNG whose telephone number is (571) 272-1449. The examiner can normally be reached on 9:30 am - 5:30 pm Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter D. Griffin can be reached on (571) 272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jennifer A. Leung/
Primary Examiner, Art Unit 1797